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| 09/097,221 | 06/12/98 | BERTRAM | R LINAB-48525 |

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EXAMINER

NOLAN, S

ART UNIT PAPER NUMBER

1772

DATE MAILED: 09/28/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/097,221

Applicant(s)

BERTRAM

Examiner

Sandra Nolan

Art Unit

1772



– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 5, 2001
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-37 and 39-46 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-37 and 39-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

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DETAILED ACTION

Claims

1. Pursuant to entry of the amendment dated July 5, 2001 (Paper No. 13), claims 28-37 and 39-46 are pending.

Rejections Maintained

2. The 35 USC 103 rejection of claims 16-25, 27-43 and 45-46 (now claims 28-37, 39-43 and 45-46), as unpatentable over Offill (US 5,817,200) in view of Rosemund et al (US 4,060,439) and Muller et al (US 5,029,615), as stated in paragraph 7 of the April 18, 2000 Office Action (Paper No. 7) and repeated in paragraph 3 of the January 2, 2001 Office Action (Paper No. 11), is maintained for the reasons of record.

3. The 35 USC 103 rejection of claims 25, 28 and 44 (now claims 28 and 44) as unpatentable over Offill in view of Rosemund et al and Muller et al, further in view of Ranney et al (US 4015044), as stated in paragraph 8 of Paper No. 7 and repeated in paragraph 4 of Paper No. 11, is maintained for the reasons of record.

Response to Arguments

4. Applicant's arguments filed in Paper No. 13 have been fully considered but they are not persuasive.

Applicant argues that the new language in claims 28 and 36 serves to distinguish the instant claims from the teachings of Offill. He asserts that the "rigid" PVC of his composites is different from the flexible PVC of the reference.

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The Examiner is not convinced that the alleged difference between Applicant's PVC and Offill's PVC is, if real, a patentable one. Both Applicant and Offill are lining a curved structure with a PVC inner layer in order to strengthen it and to prevent further damage to its interior. The nature of the PVC used in Applicant's claims has not been shown to produce any unexpected results, especially when the nature of the PVC is considered along side the Offill teaching.

Applicant argues, on page 7 of Paper No. 13, that Offill does not teach or disclose the use of a sheet of high tensile strength rigid polyvinyl chloride material having the claimed flexural modulus. Applicants point to the specification and to the Modern Plastics Encyclopedia excerpt as showing that PVC having the claimed flexural modulus is "rigid".

This argument is not convincing. The fact that the "rigid" PVC employed by Applicant has certain flexural properties does not change the fact that it must be flexible enough to line the inner surface of a curved structure, i.e., a pipe. Accordingly, Applicant has not convincingly demonstrated that the PVC which he employs is different from the PVC taught by Offill.

In the paragraph bridging pages 7 and 8 of Paper No. 13, Applicant asserts that the Ranney et al reference does not provide motivation for the use of the PVC having the flexural properties recited in the claims.

The Examiner notes these comments. However, the Ranney et al reference was not cite to show the PVC material. It was cited to show the conventionality of using silanes with polyurethane materials. Applicant has not shown that such use is not conventional or that it is not suggestive of the silanes that he employs.

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Final Rejection

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this action expires THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication should be directed to Sandra M. Nolan, whose telephone number is (703) 308-9545. The examiner can normally be reached on Monday through Thursday from 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (703) 308-4251. The fax phone number for the art unit is (703) 305-5408. The telephone number for the receptionist is (703) 308-0661.

SMN

SMN/smn
September 13, 2001
09097221.4

[Signature]
HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

9/14/01